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PEZIZA PUBIDA B. & C.

A. P. MORGAN.

From the Linnean Society's Journal, Vol. XXXI, page 492, I extract the following reference:

PEZIZA (§ Sarcoscypha) SEMITOSTA, B. & C., *Macropodia semitosta*. Sacc., *Peziza pubida*, B. & C., *Macropodia pubida*, Sacc., *Exsiccati*, Ellis & Everhart, N. American Fungi No. 2740, Ellis N. American Fungi No. 1269, Rab.-Winter Fung. Eur. No. 3275.

The spores of this species are described as "smooth, often guttulate, elliptical, ends narrowed, 28-32 x 12 mic."

Fred Jay Seaver, in the Discomycetes of Eastern Iowa, describes the spores of *Macropodia pubida* (B. & C.) Sacc. as "fusiform, rough, 38-42 x 10." In An Annotated List of Iowa Discomycetes Mr. Seaver states that *Peziza Morgani* Masee is identical with *Peziza pubida* B. & C. of Ellis's N. A. Fungi No. 1269. He states further that the specimen in Rabenhorst-Winter Fungi Europæi No. 3275 is different; he says it contains "spores which are elliptical, rough and only 15 x 8 mic."

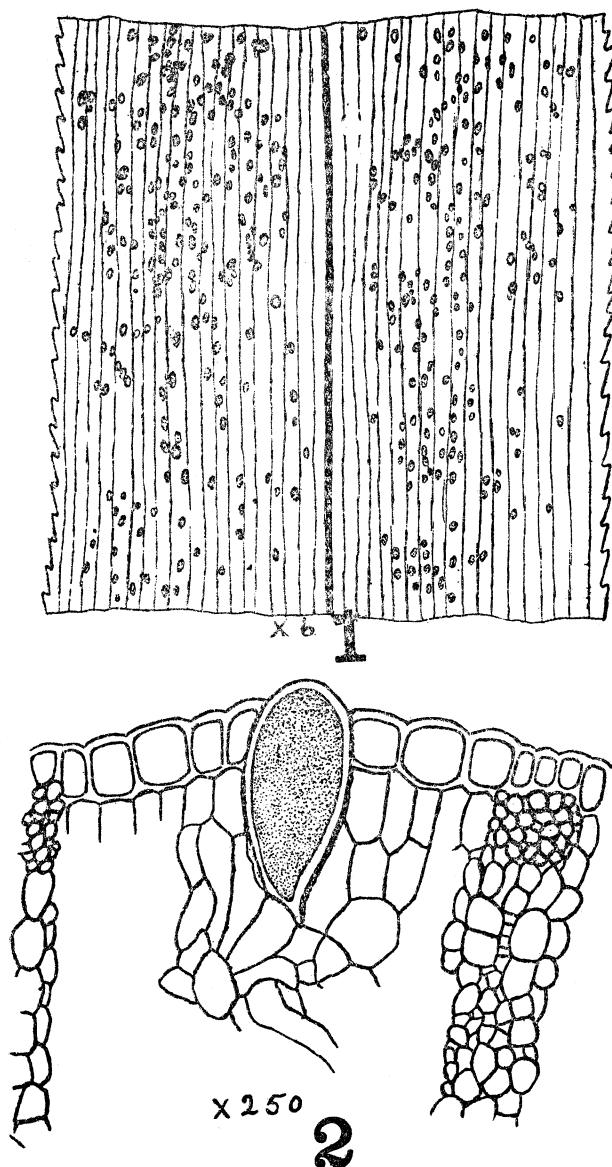
There is always surmise as to the amount of "straddle" each expert may allow to spore-measurements. It is also constantly occurring that two or more species are mixed in the same numbers of the various exsiccati.

At any rate it would appear that the numbers of *Peziza pubida* B. & C. in the collections at Kew are quite different from the corresponding numbers in the collections of the gentleman in Iowa.

A NEW SPECIES OF SYNCHYTRIUM.

J. J. DAVIS.

While examining leaves of *Scirpus atrovirens* Mühl. with a hand lens I was surprised to observe the presence in some of the leaves of a *Synchytrium*. The host plants were on the border of a button bush swamp in Kenosha county, Wisconsin, and further search revealed the presence of the parasite in one or two similar situations in the vicinity. It produces little distortion of the host and it requires a sharper eye than mine to see it without a magnifier. Attempts to secure the germination of the resting spores have not succeeded beyond the conversion of the spore contents into globular bodies about 20 μ in diameter — presumably zoosporangia.



SYNCHYTRIUM SCIRPI DAVIS.

Fig. 1, surface of leaf of *Scirpus atrovirens* attacked by the parasite.
Fig. 2, section of leaf and spore.

Material has been gathered and prepared for distribution in *Fungi Columbiani* preparatory to which it would seem desirable to give the species a name. It may be characterized as follows:

SYNCHYTRIUM SCIRPI Davis n. sp., subg. Pycnochytrium.—Spots minute, reddish brown. Distortion of the host slight, the “galls” seldom projecting more than 50 μ from the surface of the leaf. Resting spores amphigenous, scattered or aggregated, produced singly in the epidermal cells, globose, ovoid, elliptical, euboidal or brick shaped, 60-110 \times 50-75 μ in diameter. Epispore dark brown; endospore lighter brown, 3-5 μ thick. Spore contents coarsely granular, staining black with osmid acid.

On leaves of *Scirpus atrovirens* Mühl., Kenosha county, Wisconsin, August and September.

Racine, Wisconsin, August 1905.

NORTH AMERICAN SALVIA-RUSTS.

E. W. D. HOLWAY.

PUCCINIA VERTI-SEPTA Tracy & Gal. Jour. Mycol. 4:21, 1888. Diorchidium Tracyi DeToni. Sacc. Syl. 7:736, 1888. Jour. Mycol. 5:95, 1889.

O. Spermogonia few, in the center of the clusters of aecidia, epiphyllous, about 80 μ in diameter.

I. Aecidia epiphyllous, on yellow spots 1-2 mm. in diameter, surrounding the spermagonia mostly 8-10 on the spot, minute, 160-240 μ in diameter, low, peridia split into irregular segments; aecidiospores very irregular in shape and size, globose, ovate, angular, elliptical, or with one or both ends acute, and with the exception of the globose ones, with both ends thickened up to 8 μ , tuberculate, pale brown, 28-40 \times 18-26 μ ; germ-pores numerous, minute.

III. Teleutosori black, amphigenous, pulverulent, punctiform, sometimes occurring only on the margin of the underside of the leaves, causing a discoloration about 5 mm. in width all the way around; teleutospores globose, tuberculate, septa all vertical, apex mostly with a broad cap about 4 μ thick, 28-36 \times 24-38 μ ; pedicel hyaline, fragile, up to 75 μ long.

On *Salvia Sessei* Benth. Cuernavaca, Mex. Sept. 26, 1898, No. 3012 (type for the aecidium); Sept. 30, 1899, No. 3539. On *Salvia ballotaeflora* Benth. New Mex. (type for III.). No uredospores could be found, although search was made for them each year. If the teleutospores are treated with caustic they swell so as to measure 36-44 \times 36 μ , and the caps become very distinct. The germ-pores of the teleutospores are not all at or near the